



## SUS304 Ultrasonic Cleaner Machine 40KHz For Ceramic Filter Membrane

Our Product Introduction

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### Basic Information

- Place of Origin: China
- Brand Name: SKYMEN
- Certification: CE, RoHs, FCC
- Model Number: JP-11224ST
- Minimum Order Quantity: 1
- Price: Negotiation
- Packaging Details: wooden case
- Delivery Time: In Stock
- Supply Ability: 100 pcs per month



### Product Specification

- Ultrasonic Power: 61200W
- Heating Power: 69000W
- Power Supply: 380V 3 Phase
- Generator: 34pcs
- Frequency: 28/40KHz Default
- Tank Capacity: SUS304
- Highlight: **SUS304 Ultrasonic Cleaner Machine, Ultrasonic Cleaner Machine 40KHz, Ceramic Filter Membrane Ultrasonic Washer Machine**



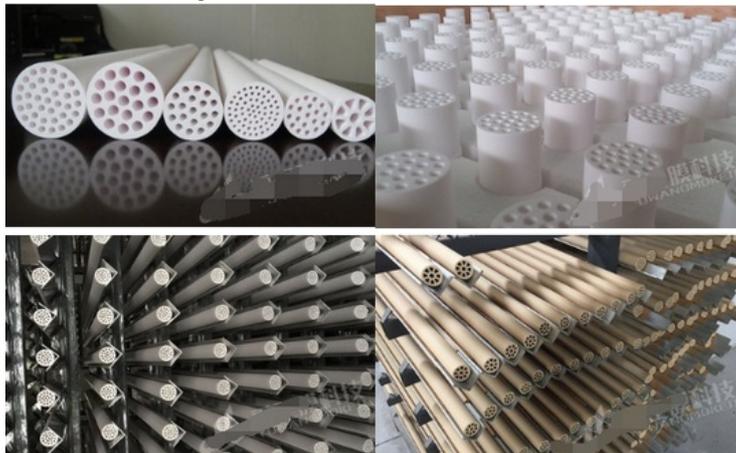
## Product Description

### 10000L Ultrasonic Cleaning Machine For Ceramic Filter Membrane 40KHz

#### Detailed Specification of this machine:

1	Model	JP-11224ST	
2	Parameter	Function	Ultrasonic cleaning
		Ultrasonic Frequency	28/40kHz (other frequency can be customized)
		Tank Material	SUS 304 (SUS 316 can be customized)
		Thickness of tank	3mm
		Inner tank dimension	3200*2000*1500mm
		Tank Capacity	9600L
		Transducer	1224pcs
		Ultrasonic Power	61200W
		Heating Power	69000W
		Time setting of Ultrasonic	0~99 hours
		Temperature setting	Room temperature ~ 95°C adjustable
		Drain value	Available
		Water inlet/outlet	Available
		Generator	34 sets
		Generator power control	1800W
		Generator shelf	Available
Basket	Available		
Basket load	4000KG		
3	Packing	Overall size	370*270*230cm
		Packing size	380*280*250cm
		Packing detail	By wooden case(No logs, free of fumigation)
		N.W/G.W	4000KG/4300KG
4	Power supply	380V 3 phase; 220V 3 pahse; 415V; 600V	
5	Warranty	1 year warranty for spare parts, all life technical support	
6	Certificate	CE, RoHS; FCC, REACH	
7	Lead time	20~30 working days after deposit	
7	Optional functions	Filtration cycle system	Available; capture dirty water, recycle clean water
		Lifting system for basket	Available; take the basket up and down
		Dunking system	Available; Speed up cleaning
		Bubbling	Available; need to connect air compressor
		Electrolysis	Available; For cleaning more complex structure mold
		Cooling system	Available; To cool down inflammable and explosive
		Constant temperature	Available;
		Roller barrel	Available; for clean coins and big quantity parts
		Anti-explosion electric box	Available;
		Deionized(DI) water	Available
		Double/Multi frequency	Available; 28/40/20/68/80/132KHz
Other funtions	Negotiate via email		

#### Ultrasonic cleaning of Ceramic Filter Membrane



Other size and capacity for reference:

<b>Brand</b>	Skymen		
<b>Model</b>	JP-1216ST		
<b>Inner tank size</b>	1500*1000*1000mm	<b>Capacity</b>	1500L
<b>Transducer</b>	216pcs	<b>Ultrasonic power</b>	0~10800W Adjustable
<b>Frequency</b>	28/40KHz	<b>Heating power</b>	36000W
<b>Max power</b>	46800W	<b>Power supply</b>	380V/220V 3 Phase
<b>Temperature control</b>	Room temperature~95°C	<b>Time control</b>	0~99 Hours
<b>Tank material</b>	SUS 304	<b>Tank Thickness</b>	3mm
<b>Water inlet/outlet</b>	Yes	<b>Caster</b>	Yes
<b>Basket</b>	Yes	<b>Manual</b>	Available
<b>Warranty</b>	1 Year, technical support always		
<b>Application</b>	Heat exchanger; Boiler; BBQ grills; Mold, Casting; etc.		
<b>Available functions</b>	Water filtration system; Lifting system for basket; Bubble system; Spraying, etc		

<b>Brand</b>	Skymen		
<b>Model</b>	JP-1288ST		
<b>Inner tank size</b>	2000*1200*800mm	<b>Capacity</b>	1920L
<b>Transducer</b>	288pcs	<b>Ultrasonic power</b>	0~14400W Adjustable
<b>Frequency</b>	28/40KHz	<b>Heating power</b>	45000W
<b>Max power</b>	59400W	<b>Power supply</b>	380V/220V 3 Phase
<b>Temperature control</b>	Room temperature~95°C	<b>Time control</b>	0~99 Hours
<b>Tank material</b>	SUS 304	<b>Tank Thickness</b>	3mm
<b>Water inlet/outlet</b>	Yes	<b>Caster</b>	Yes
<b>Basket</b>	Yes	<b>Manual</b>	Available
<b>Warranty</b>	1 Year, technical support always		
<b>Application</b>	Heat exchanger; Boiler; BBQ grills; Mold, Casting; etc.		
<b>Available functions</b>	Water filtration system; Lifting system for basket; Bubble system; Spraying, etc		

<b>Brand</b>	Skymen		
<b>Model</b>	JP-1360ST		
<b>Inner tank size</b>	2000*1200*1000mm	<b>Capacity</b>	2400L
<b>Transducer</b>	360pcs	<b>Ultrasonic power</b>	0~18000W Adjustable
<b>Frequency</b>	28/40KHz	<b>Heating power</b>	54000W
<b>Max power</b>	72000W	<b>Power supply</b>	380V/220V 3 Phase
<b>Temperature control</b>	Room temperature~95°C	<b>Time control</b>	0~99 Hours
<b>Tank material</b>	SUS 304	<b>Tank Thickness</b>	3mm
<b>Water inlet/outlet</b>	Yes	<b>Caster</b>	Yes
<b>Basket</b>	Yes	<b>Manual</b>	Available
<b>Warranty</b>	1 Year, technical support always		
<b>Application</b>	Heat exchanger; Boiler; BBQ grills; Mold, Casting; etc.		
<b>Available functions</b>	Water filtration system; Lifting system for basket; Bubble system; Spraying, etc		

<b>Brand</b>	Skymen		
<b>Model</b>	JP-1432ST		
<b>Inner tank size</b>	2000*1500*1200mm	<b>Capacity</b>	3000L
<b>Transducer</b>	432pcs	<b>Ultrasonic power</b>	0~21600W Adjustable
<b>Frequency</b>	28/40KHz	<b>Heating power</b>	63000W
<b>Max power</b>	84600W	<b>Power supply</b>	380V/220V 3 Phase
<b>Temperature control</b>	Room temperature~95°C	<b>Time control</b>	0~99 Hours
<b>Tank material</b>	SUS 304	<b>Tank Thickness</b>	3mm
<b>Water inlet/outlet</b>	Yes	<b>Caster</b>	Yes
<b>Basket</b>	Yes	<b>Manual</b>	Available
<b>Warranty</b>	1 Year, technical support always		
<b>Application</b>	Heat exchanger; Boiler; BBQ grills; Mold, Casting; etc.		
<b>Available functions</b>	Water filtration system; Lifting system for basket; Bubble system; Spraying, etc		

<b>Brand</b>	Skymen		
<b>Model</b>	JP-1576ST		
<b>Inner tank size</b>	2500*1500*1200mm	<b>Capacity</b>	4500L
<b>Transducer</b>	576pcs	<b>Ultrasonic power</b>	0~28800W Adjustable
<b>Frequency</b>	28/40KHz	<b>Heating power</b>	63000W
<b>Max power</b>	91800W	<b>Power supply</b>	380V/220V 3 Phase
<b>Temperature control</b>	Room temperature~95°C	<b>Time control</b>	0~99 Hours
<b>Tank material</b>	SUS 304	<b>Tank Thickness</b>	3mm
<b>Water inlet/outlet</b>	Yes	<b>Caster</b>	Yes
<b>Basket</b>	Yes	<b>Manual</b>	Available
<b>Warranty</b>	1 Year, technical support always		
<b>Application</b>	Heat exchanger; Boiler; BBQ grills; Mold, Casting; etc.		
<b>Available functions</b>	Water filtration system; Lifting system for basket; Bubble system; Spraying, etc		

<b>Brand</b>	Skymen		
<b>Model</b>	JP-1648ST		
<b>Inner tank size</b>	3000*1500*1200mm	<b>Capacity</b>	5400L
<b>Transducer</b>	648pcs	<b>Ultrasonic power</b>	0~32400W Adjustable
<b>Frequency</b>	28/40KHz	<b>Heating power</b>	63000W
<b>Max power</b>	95400W	<b>Power supply</b>	380V/220V 3 Phase
<b>Temperature control</b>	Room temperature~95°C	<b>Time control</b>	0~99 Hours
<b>Tank material</b>	SUS 304	<b>Tank Thickness</b>	3mm
<b>Water inlet/outlet</b>	Yes	<b>Caster</b>	Yes
<b>Basket</b>	Yes	<b>Manual</b>	Available
<b>Warranty</b>	1 Year, technical support always		
<b>Application</b>	Heat exchanger; Boiler; BBQ grills; Mold, Casting; etc.		
<b>Available functions</b>	Water filtration system; Lifting system for basket; Bubble system; Spraying, etc		

<b>Brand</b>	Skymen		
<b>Model</b>	JP-1720ST		
<b>Inner tank size</b>	4000*1600*1000mm	<b>Capacity</b>	6400L
<b>Transducer</b>	720pcs	<b>Ultrasonic power</b>	0~36000W Adjustable
<b>Frequency</b>	28/40KHz	<b>Heating power</b>	66000W
<b>Max power</b>	102000W	<b>Power supply</b>	380V/220V 3 Phase
<b>Temperature control</b>	Room temperature~95°C	<b>Time control</b>	0~99 Hours
<b>Tank material</b>	SUS 304	<b>Tank Thickness</b>	3mm
<b>Water inlet/outlet</b>	Yes	<b>Caster</b>	Yes
<b>Basket</b>	Yes	<b>Manual</b>	Available
<b>Warranty</b>	1 Year, technical support always		
<b>Application</b>	Heat exchanger; Boiler; BBQ grills; Mold, Casting; etc.		
<b>Available functions</b>	Water filtration system; Lifting system for basket; Bubble system; Spraying, etc		

<b>Brand</b>	Skymen		
<b>Model</b>	JP-1936ST		
<b>Inner tank size</b>	3500*1600*1300mm	<b>Capacity</b>	7280L
<b>Transducer</b>	936pcs	<b>Ultrasonic power</b>	0~46800W Adjustable
<b>Frequency</b>	28/40KHz	<b>Heating power</b>	66000W
<b>Max power</b>	112800W	<b>Power supply</b>	380V/220V 3 Phase
<b>Temperature control</b>	Room temperature~95°C	<b>Time control</b>	0~99 Hours
<b>Tank material</b>	SUS 304	<b>Tank Thickness</b>	3mm
<b>Water inlet/outlet</b>	Yes	<b>Caster</b>	Yes
<b>Basket</b>	Yes	<b>Manual</b>	Available
<b>Warranty</b>	1 Year, technical support always		
<b>Application</b>	Heat exchanger; Boiler; BBQ grills; Mold, Casting; etc.		
<b>Available functions</b>	Water filtration system; Lifting system for basket; Bubble system; Spraying, etc		

<b>Brand</b>	Skymen		
<b>Model</b>	JP-11152ST		
<b>Inner tank size</b>	2500*2000*1700mm	<b>Capacity</b>	8500L
<b>Transducer</b>	1152pcs	<b>Ultrasonic power</b>	0~57600W Adjustable
<b>Frequency</b>	28/40KHz	<b>Heating power</b>	69000W
<b>Max power</b>	126600W	<b>Power supply</b>	380V/220V 3 Phase
<b>Temperature control</b>	Room temperature~95°C	<b>Time control</b>	0~99 Hours
<b>Tank material</b>	SUS 304	<b>Tank Thickness</b>	3mm
<b>Water inlet/outlet</b>	Yes	<b>Caster</b>	Yes
<b>Basket</b>	Yes	<b>Manual</b>	Available
<b>Warranty</b>	1 Year, technical support always		
<b>Application</b>	Heat exchanger; Boiler; BBQ grills; Mold, Casting; etc.		
<b>Available functions</b>	Water filtration system; Lifting system for basket; Bubble system; Spraying, etc		

<b>Brand</b>	Skymen		
<b>Model</b>	JP-11224ST		
<b>Inner tank size</b>	3200*2000*1500mm	<b>Capacity</b>	9600L
<b>Transducer</b>	1224pcs	<b>Ultrasonic power</b>	0~61200W Adjustable
<b>Frequency</b>	28/40KHz	<b>Heating power</b>	69000W
<b>Max power</b>	130200W	<b>Power supply</b>	380V/220V 3 Phase
<b>Temperature control</b>	Room temperature~95°C	<b>Time control</b>	0~99 Hours
<b>Tank material</b>	SUS 304	<b>Tank Thickness</b>	3mm
<b>Water inlet/outlet</b>	Yes	<b>Caster</b>	Yes
<b>Basket</b>	Yes	<b>Manual</b>	Available
<b>Warranty</b>	1 Year, technical support always		
<b>Application</b>	Heat exchanger; Boiler; BBQ grills; Mold, Casting; etc.		
<b>Available functions</b>	Water filtration system; Lifting system for basket; Bubble system; Spraying, etc		

<b>Brand</b>	Skymen		
<b>Model</b>	JP-11368ST		
<b>Inner tank size</b>	8000*1200*1200mm	<b>Capacity</b>	11520L
<b>Transducer</b>	1368pcs	<b>Ultrasonic power</b>	0~68400W Adjustable
<b>Frequency</b>	28/40KHz	<b>Heating power</b>	69000W
<b>Max power</b>	137400W	<b>Power supply</b>	380V/220V 3 Phase
<b>Temperature control</b>	Room temperature~95°C	<b>Time control</b>	0~99 Hours
<b>Tank material</b>	SUS 304	<b>Tank Thickness</b>	3mm
<b>Water inlet/outlet</b>	Yes	<b>Caster</b>	Yes
<b>Basket</b>	Yes	<b>Manual</b>	Available
<b>Warranty</b>	1 Year, technical support always		
<b>Application</b>	Heat exchanger; Boiler; BBQ grills; Mold, Casting; etc.		
<b>Available functions</b>	Water filtration system; Lifting system for basket; Bubble system; Spraying, etc		

<b>Brand</b>	Skymen		
<b>Model</b>	JP-11512ST		
<b>Inner tank size</b>	8000*1600*1600mm	<b>Capacity</b>	20480L
<b>Transducer</b>	1512pcs	<b>Ultrasonic power</b>	0~75600W Adjustable
<b>Frequency</b>	28/40KHz	<b>Heating power</b>	72000W
<b>Max power</b>	147600W	<b>Power supply</b>	380V/220V 3 Phase
<b>Temperature control</b>	Room temperature~95°C	<b>Time control</b>	0~99 Hours
<b>Tank material</b>	SUS 304	<b>Tank Thickness</b>	3mm
<b>Water inlet/outlet</b>	Yes	<b>Caster</b>	Yes
<b>Basket</b>	Yes	<b>Manual</b>	Available
<b>Warranty</b>	1 Year, technical support always		
<b>Application</b>	Heat exchanger; Boiler; BBQ grills; Mold, Casting; etc.		
<b>Available functions</b>	Water filtration system; Lifting system for basket; Bubble system; Spraying, etc		

**Product show:**



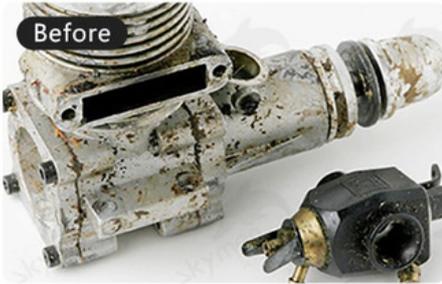
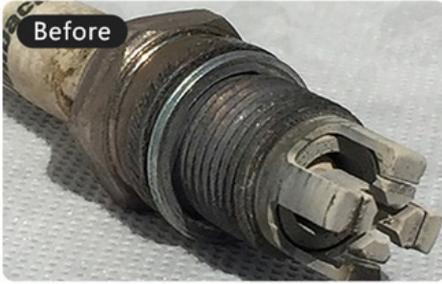


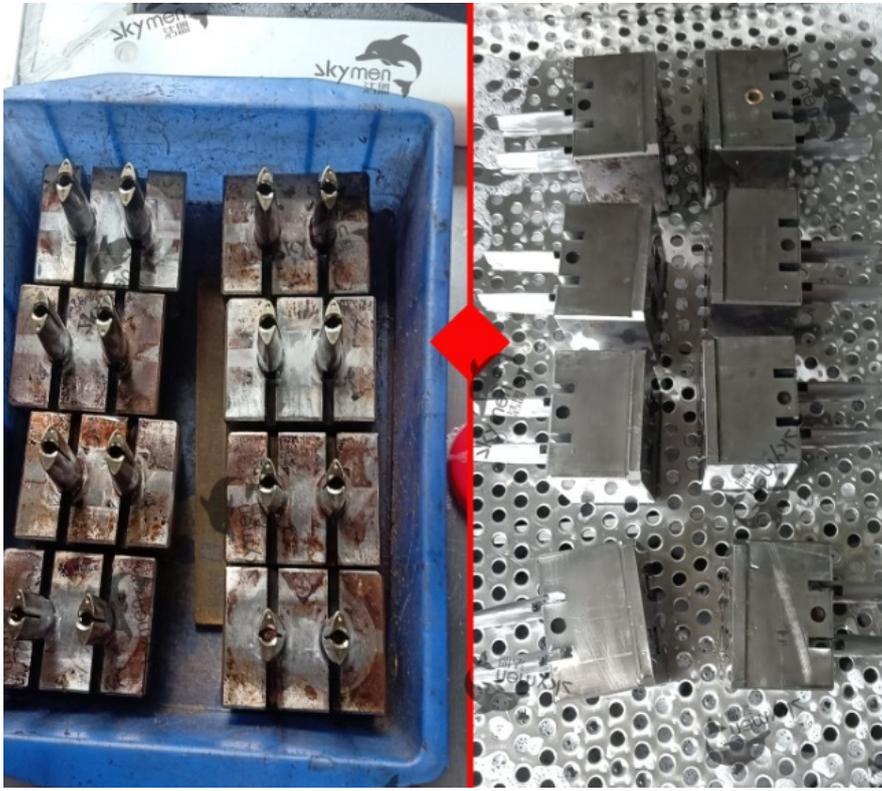


Cleaning effect show:

# CLEANING EFFECT

Better cleaning when cleaning with detergent





Skymen Cleaning Equipment Shenzhen CO., Ltd.





The physical mechanism of ultrasonic cleaning is mainly ultrasonic cavitation, so to achieve a good cleaning effect, appropriate acoustic parameters and physical and chemical properties of the cleaning agent must be selected.

The higher the sound intensity, the stronger the cavitation. But after the sound intensity reaches a certain value, the cavitation tends to be saturated. If the sound intensity is too high, a large number of bubbles will be generated to increase the scattering attenuation. At the same time, the increase of the sound intensity will increase the nonlinear attenuation and weaken the cleaning effect far away from the sound source.

The higher the frequency, the higher the cavitation threshold, which means that to produce acoustic cavitation, the higher the frequency, the greater the sound intensity required. For example, to produce cavitation in water, the power required at 400kHz is 10 times greater than that at 10kHz. The frequency range generally used is 20-40kHz. The low frequency has high cavitation strength, which is suitable for the occasions where the surface of large cleaning parts and the surface of the cleaning parts have high bonding strength, but it is not easy to penetrate deep holes and parts with complex surface shapes, and the noise is large; higher frequencies have higher cavitation strength Weak, but low noise, suitable for cleaning with more complex surface shapes, slits and dirt and the surface of the cleaning part. Sound field distribution. A stable reverberation field is beneficial to cleaning. If there is a standing wave sound field in the cleaning tank, the cleaning parts cannot be cleaned uniformly due to uneven sound pressure distribution. Therefore, when possible, the geometry of the groove should be chosen to be suitable for establishing a mixed sound field. In addition, dual-frequency, multi-frequency, and frequency sweeping modes can be used to avoid cleaning the "dead zone".

The temperature of the cleaning fluid. As the temperature rises, the surface tension coefficient and viscosity coefficient of the liquid will decrease, so the cavitation threshold will decrease, making cavitation easy to occur; however, due to the temperature rise, the increase in vapor pressure will reduce the cavitation intensity. The preferred temperature of water is 60 degrees Celsius, and different cleaning agents have different optimal temperatures.

Coefficient of viscosity. The liquid with a large viscosity coefficient is difficult to produce cavitation, and the transmission loss is also increased, which is not conducive to cleaning.

Vapor pressure. The vapor pressure is low, the cavitation threshold is high, and there are few cavitation bubbles, but the impact force generated when the cavitation bubbles are closed is large. On the contrary, the high vapor pressure is easy to cavitation, but the cavitation intensity decreases.

Surface Tension. The liquid has high surface tension and high cavitation strength, but it is not easy to produce cavitation. The type of gas contained in the liquid. The greater the specific heat capacity of the gas, the higher the cavitation intensity. Therefore, it is better to use monoatomic gases such as helium, neon and argon than to use diatomic gases such as nitrogen and oxygen.

In addition, when the cleaning liquid is not flowing, it is beneficial to cavitation, but if the cleaning liquid is not filtered and circulated, the dirt will be redeposited on the surface of the cleaning part, so it needs to flow, but it should not flow too fast.



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